What is claimed:

1. A light emitting apparatus comprising:

a source of light for emitting light;

a down conversion material receiving the emitted light and converting the emitted light into transmitted light and backward transmitted light; and

an optic device configured to receive the backward transmitted light and transfer the backward transmitted light outside of the optic device.

2. The light emitting apparatus of claim 1, wherein the source of light is a semiconductor light emitting diode, including one of a light emitting diode (LED), a laser diode (LD), or a resonant cavity light emitting diode (RCLED).

3. The light emitting apparatus of claim 1, wherein the down conversion material includes one of phosphor or other material for absorbing light in one spectral region and emitting light in another spectral region.

4. The light emitting apparatus of claim 1, wherein the optic device includes a light transmissive material.

5. The light emitting apparatus of claim 1, wherein the optic device includes at least one of a lens or a light guide having a light transmissive property.

6. The light emitting apparatus of claim 1, wherein the optic device is further configured to direct the light emitted from the source toward the down conversion material.

7. The light emitting apparatus of claim 1, wherein the optic device includes one of a lens or a light guide for directing substantially all of the light emitted from the source toward the down conversion material.

8. The light emitting apparatus of claim 1, wherein the source of light is disposed adjacent a first end of the optic device.

9. The light emitting apparatus of claim 8, wherein the down conversion material is disposed adjacent a second end of the optic device, the second end opposed to the first end.

10. The light emitting apparatus of claim 1, wherein the optic device is geometrically configured to transmit the reflected light out of the optic device.

11. The light emitting apparatus of claim 1, wherein the source of light includes a plurality of semiconductor light emitters.

12. The light emitting apparatus of claim 9, wherein the down conversion material is deposited on a portion of the second end of the optic device.

13. The light emitting apparatus of claim 12, wherein the down conversion material is deposited to cover substantially the second end of the optic device.

14. The light emitting apparatus of claim 1, including a collecting device for collecting the reflected light which is transferred out of the optic device.

15. The light emitting apparatus of claim 14, wherein the collecting device includes a reflector for directing the reflected light away from the collecting device.

16. The light emitting apparatus of claim 15, wherein (a) the source of light is disposed adjacent a first end of the optic device, (b) the down conversion material is disposed adjacent a second end of the optic device, and (c) the first end of the optic device is disposed adjacent a first end of the reflector.

17. The light emitting apparatus of claim 1, wherein a geometrical shape of the optic device includes one of a cone, sphere, hyperbola, parabola, ellipse, pyramid, or box shaped.

18. The light emitting apparatus of claim 1, further including a reflector surrounding at least a portion of the optic device, and a light diffuser deposited on top of at least a portion of the reflector.

19. The light emitting apparatus of claim 18, wherein the down conversion material is disposed between the source of light and the reflector, and the down conversion material has a curved shape.

20. A light emitting apparatus comprising:

a cylindrical optic including a light transmissive material;

a light radiation source disposed within the cylindrical optic; and

a down conversion material, disposed at a middle section of and within the cylindrical optic, for at least one of transmitting or reflecting light transmitted by the light radiation source.

21. The light emitting apparatus of claim 20, wherein the light radiation source is a semiconductor light emitter, including one of a light emitting diode (LED), a laser diode (LD), or a resonant cavity light emitting diode (RCLED).

22. The light emitting apparatus of claim 20, where the light radiation source is disposed adjacent one lateral end of the cylindrical optic.

23. The light emitting device of claim 20, wherein the light radiation source includes first and second radiation sources, spaced from each other and both disposed adjacent one lateral end of the cylindrical optic.

24. The light emitting device of claim 20, wherein the down conversion material includes one of phosphor or other material for absorbing light in one spectral region and emitting light in another spectral region.

25. The light emitting device of claim 20, wherein the down conversion material is disposed substantially parallel to a longitudinal axis of the cylindrical optic.

26. The light emitting apparatus of claim 20, wherein the light radiation source includes at least one light source on each side of the down conversion material.

27. The light emitting apparatus of claim 26, wherein the light sources are mounted on at least one substrate.